ABSTRACT

A sensor is provided which comprises a waveguide for allowing an electromagnetic wave to propagate therethrough and disposing an object at a plurality of positions thereof, and a detecting portion for detecting the electromagnetic wave which has interacted with the object at the plurality of positions and propagated through the waveguide, wherein a property of the object is analyzed or identified based on an information obtained from the electromagnetic wave detected by the detecting portion. Thereby, accurate detection can be effected even when the amount of an object is small.